

Amendments to the Abstract:

Please replace the previous Abstract with the following Abstract:

A method and apparatus for efficient implementation of a frame-based trellis spectral shaping with a variable look-ahead depth that reduces memory and computational requirements that includes a data encoder for generating spectrally-shaped coded data according to a trellis coding system, a metric computation and trellis engine, and a processing circuit to apply a selected coding strategy to data frames to generate spectrally-shaped coded data form transmission.